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FILE LAST UPDATED: 20 Nov 2007  (20071120/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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L81  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2007 ACS on STN
AN   2005:1004833  HCAPLUS  Full-text
DN   143:287913
TI   Pigment concentrates based on phthalocyanine pigments.
IN   Weber, Joachim; Opravil, Manfred; Venera, Magali; Macholdt,
     Hans-Tobias
PA   Clariant GmbH, Germany
SO   PCT Int. Appl., 26 pp.
     CODEN: PIXXD2
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2005085366        A1    20050915    WO 2005-EP1800         20050222 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     DE 102004010284      A1    20050922    DE 2004-102004010284   20040303
     CA 2558502           A1    20050915    CA 2005-2558502        20050222 <--
     EP 1723202           A1    20061122    EP 2005-715434         20050222 <--
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     CN 1934197           A     20070321    CN 2005-80009292       20050222 <--
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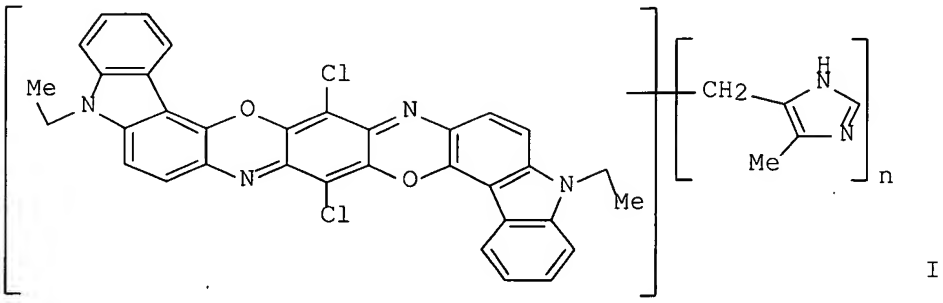
	BR 2005008367	A	20070731	BR 2005-8367	20050222 <--
	JP 2007527936	T	20071004	JP 2007-501163	20050222 <--
	US 2007186815	A1	20070816	US 2006-591578	20061129 <--
PRAI	DE 2004-102004010284	A	20040303		
	WO 2005-EP1800	W	20050222 <--		

OS MARPAT 143:287913

GI



I

AB A pigment concentrate comprising blue copper phthalocynine pigments (PhP) and a dispersing agent I (n = 1 - 4) at PhP - I ratios (99.9:0.1) - (75:25) is used for dyeing plastics, color filters, inks for ink-jet printing, electrophotog. toners and developers. Thus, a typical concentrate prepared by mixing 16 h at 40° 450 weight parts of NaCl, 75 weight parts of Pigment Blue 15:6, 3.75 weight parts of a dispersing agent I (n = 1) and 110 mL of diethylene glycol and treating with 2,500 weight parts of aqueous HCl is for manufacture a wine red paint having small viscosity.

IC ICM C09B0067-22
ICS C09B0067-20

CC 41-7 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

IT **147-14-8D**, Pigment Blue 15, **reaction products** with imidazole derivs.
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Pigment Blue 15, Pigment Blue 15:0, Pigment Blue 15:1, Pigment Blue 15:2, Pigment Blue 15:3, Pigment Blue 15:4, Pigment Blue 15:6; pigment concentrate comprising blue copper phthalocynine pigments and a dispersing agent for dyeing plastics)

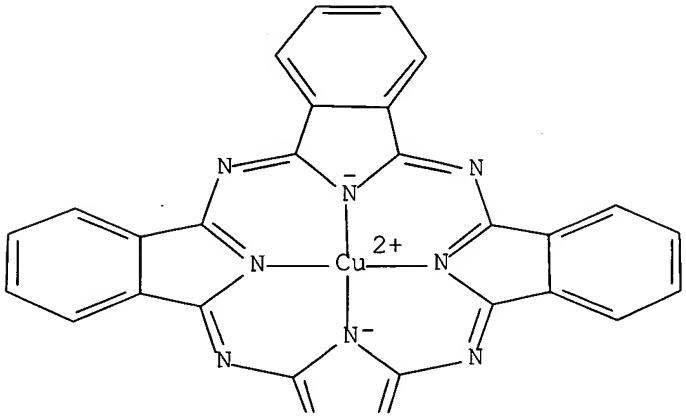
IT **29636-87-1DP**, **reaction products** with pigment blue 15
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dispersing agent; pigment concentrate comprising blue copper phthalocynine pigments and a dispersing agent for dyeing plastics, color filters, inks for ink-jet printing, electrophotog. toners and developers)

IT **147-14-8D**, Pigment Blue 15, **reaction products** with imidazole derivs.
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(Pigment Blue 15, Pigment Blue 15:0, Pigment Blue 15:1, Pigment Blue 15:2, Pigment Blue 15:3, Pigment Blue 15:4, Pigment Blue 15:6; pigment concentrate comprising blue copper phthalocynine pigments and a dispersing agent for dyeing plastics)

RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka
ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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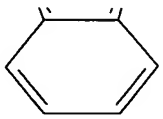
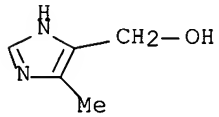


IT **29636-87-1DP, reaction products** with pigment
blue 15
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(dispersing agent; pigment concentrate comprising blue copper phthalocynine
pigments and a dispersing agent for dyeing plastics, color filters,
inks for ink-jet printing, electrophotog. toners and developers)

RN 29636-87-1 HCAPLUS

CN 1H-Imidazole-5-methanol, 4-methyl- (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Endo	1995			US 5420187 A	HCAPLUS

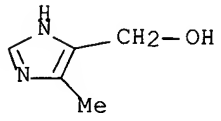
Hoechst Aktiengesellsch	1989		EP 0321919 A	HCAPLUS
Nippon Kayaku Kk	1997		JP 09137075 A	HCAPLUS
Sumitomo Chemical Compa	1995		EP 0659842 A	HCAPLUS
Toyo Ink Manufacturing	1994		GB 2275477 A	HCAPLUS

L81 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:719906 HCAPLUS Full-text
DN 141:208583
TI Production of transparent pigment preparations based on perylene-3,4,9,10-tetracarboxylic diimide
IN **Weber, Joachim**; Opravil, Manfred; Dietz, Erwin
PA **Clariant GmbH, Germany**
SO Ger. Offen., 15 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

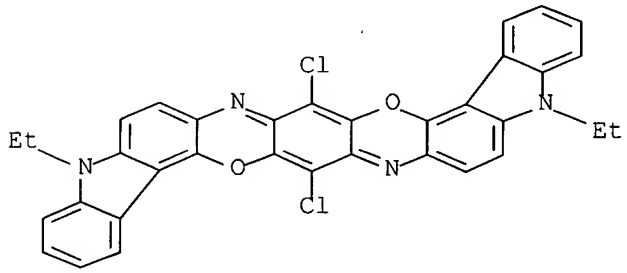
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10307557	A1	20040902	DE 2003-10307557	20030221
	WO 2004074384	A1	20040902	WO 2004-EP868	20040131
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1597323	A1	20051123	EP 2004-707135	20040131
	EP 1597323	B1	20061220		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1751104	A	20060322	CN 2004-80004757	20040131
	JP 2006518400	T	20060810	JP 2006-501673	20040131
	ES 2279343	T3	20070816	ES 2004-4707135	20040131
	US 2006135774	A1	20060622	US 2005-546500	20050819
PRAI	DE 2003-10307557	A	20030221		
	WO 2004-EP868	W	20040131		

OS MARPAT 141:208583
AB The title pigments, which are economical and have good rheol. properties, are prepared from perylene-3,4,9,10-tetracarboxylic diimide (I) or its Cl or Br derivs. and are milled under specified conditions. Milling I in the presence of a pigment dispersant [**5-(hydroxymethyl)- 4-methylimidazole** derivative of P.V. 23] for 30 min at 80° and power d. 0.45 lW/L milling room gave a pigment dispersion with good rheol. and tinctorial strength.
IC ICM C09B0005-62
ICS C09B0067-32; C09B0067-04
CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 25
IT **29636-87-1D, 5-(Hydroxymethyl)-4-methylimidazole, reaction products** with **pigment Violet 23** 135934-43-9 162065-10-3
215247-95-3D, Pigment Violet 23, reaction products with methylolmethylimidazole
744245-67-8
RL: MOA (Modifier or additive use); USES (Uses)
(dispersants for transparent pigment prepns. based on perylene-3,4,9,10-tetracarboxylic diimide)

IT **29636-87-1D, 5-(Hydroxymethyl)-4-methylimidazole, reaction products** with **pigment Violet 23 215247-95-3D, Pigment Violet 23, reaction products** with methylolmethylimidazole
RL: MOA (Modifier or additive use); USES (Uses)
(dispersants for transparent pigment prepns. based on perylene-3,4,9,10-tetracarboxylic diimide)
RN 29636-87-1 HCAPLUS
CN 1H-Imidazole-5-methanol, 4-methyl- (CA INDEX NAME)



RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)



L81 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:596751 HCAPLUS Full-text
DN 111:196751
TI Heterocyclic pigments for organic polymers and coating materials with good rheological properties
IN Dietz, Erwin; Kapaun, Gustav; Kappert, Michael; Prokschy, Frank; Kroh, Adolf; Urban, Manfred
PA Hoechst A.-G., Fed. Rep. Ger.
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 321919	A2	19890628	EP 1988-121275	19881220
	EP 321919	A3	19911030		
	EP 321919	B1	19940209		
	R: CH, DE, FR, GB, IT, LI				
	DE 3838814	A1	19890706	DE 1988-3838814	19881117
	US 4986852	A	19910122	US 1988-286894	19881220
	DK 8807146	A	19890623	DK 1988-7146	19881221

	DK 169629	B1	19941227		
	JP 01213366	A	19890828	JP 1988-320725	19881221
	JP 2650993	B2	19970910		
	CA 1338668	C	19961022	CA 1988-586550	19881221
PRAI	DE 1987-3743619	A	19871222		
	DE 1988-3838814	A	19881117		

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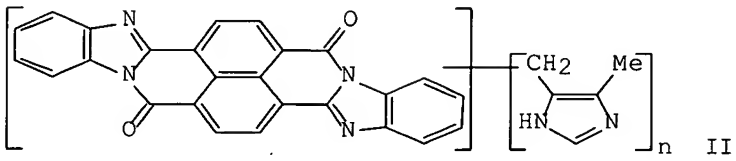


II

AB The title pigments R[CH2A(R1)(R2)R3]n (A = 5- or 6-membered aromatic or heterocyclic residue containing N and/or S and/or O to which a C atom or methylene groups is bound; P = polycyclic pigment residue; R1, R2 = H, C1-4 alkyl, C2 alkylene, aryl; R3 = H, C1-4 alkyl, C1-3 hydroxyalkyl, C2 alkylene; n = 0.001-0.2), which have good rheol. properties and are thus useful in lacquers, printing inks, polymers, textile spinning solns., etc., are prepared C. I. Pigment Orange 43 (I) was reacted with **4 -methyl-5-(hydroxymethyl)imidazole** hydrochloride in the presence of H2SO4.H2O at 105° for 4 h, producing II (n = .apprx.0.5), which was ground with addnl. I, producing II (n = .apprx.0.025) which was used to pigment an alkyd-melamine resin lacquer.

IC ICM C09B0069-00
ICS C08K0005-03

CC 41-5 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 37, 40, 42

IT 128-69-8 **147-14-8, C.I. Pigment Blue 15** 980-26-7, 2,9-Dimethylquinacridone **215247-95-3**
RL: USES (Uses)
(pigment compns. containing, having good rheol. properties)

IT 128-69-8DP, 3,4,9,10-Perylenetetracarboxylic acid dianhydride, reaction products with paraformaldehyde and imidazole **147-14-8DP**, Copper phthalocyanine, **reaction products** with heterocyclic compds. 288-32-4DP, Imidazole, reaction products with perylenetetracarboxylic acid dianhydride and paraformaldehyde 636-72-6DP, 2-Hydroxymethylthiophene, reaction products with polycyclic pigments 693-98-1DP, 2-Methylimidazole, reaction products with diphenylaminoterephthalic acid paraformaldehyde 700-06-1DP, 3-Hydroxymethylindole, reaction products with polycyclic pigments 1883-75-6DP, 2,5-Bishydroxymethylfuran, reaction products with polycyclic pigments 4216-02-8DP, C.I. Pigment Red 194, reaction products with heterocyclic compds. 4424-06-0DP, C.I. Pigment Orange 43, reaction products with heterocyclic compds. 5521-31-3DP, reaction products with paraformaldehyde and imidazole 10109-95-2DP, reaction products with methylimidazole and paraformaldehyde 27472-36-2DP, 2-Hydroxymethylpyrrole, reaction products with polycyclic pigments 30525-89-4DP, Paraformaldehyde, reaction products with perylenetetracarboxylic acid dianhydride and imidazole **38585-62-5DP, reaction products** with polycyclic pigments 54660-00-3DP, reaction products with heterocyclic compds. 102365-78-6DP, reaction products with perylenetetracarboxylic

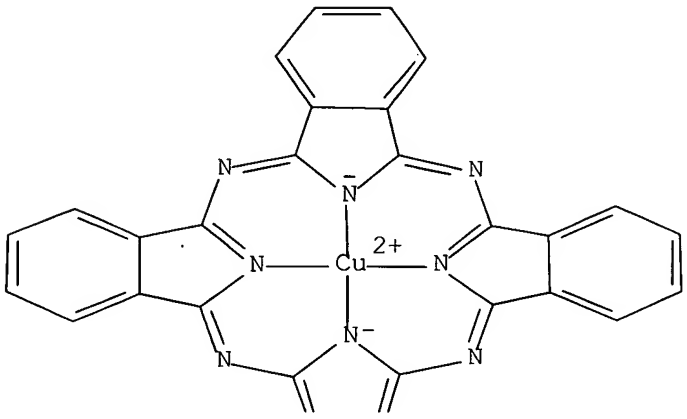
acid dimethylimide **215247-95-3DP, reaction products** with heterocyclic compds.
RL: IMF (Industrial manufacture); PREP (Preparation)
(pigments, manufacture of, having good rheol. properties)

IT 980-26-7DP, 2,9-Dimethylquinacridone, reaction products with paraformaldehyde and methylimidazole **29636-87-1DP, 5-Hydroxymethyl-4-methylimidazole, reaction products** with quinacridone
RL: IMF (Industrial manufacture); PREP (Preparation)
(pigments, manufacture of, with good rheol. properties)

IT **147-14-8, C.I. Pigment Blue 15 215247-95-3**
RL: USES (Uses)
(pigment compns. containing, having good rheol. properties)

RN 147-14-8 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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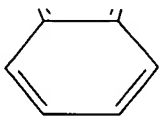
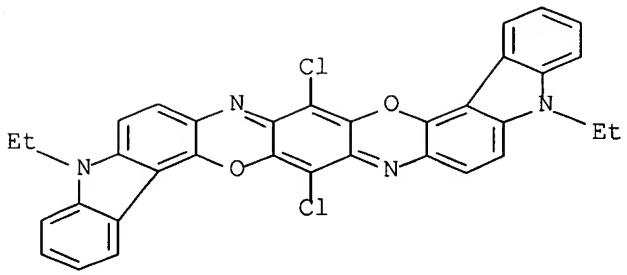


RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)

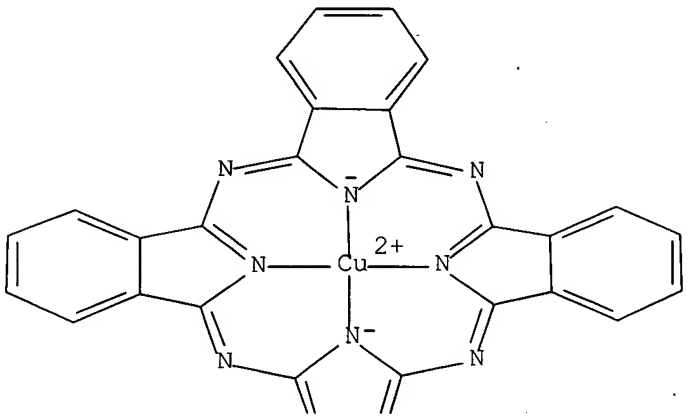


IT **147-14-8DP**, Copper phthalocyanine, **reaction products** with heterocyclic compds. **38585-62-5DP**, **reaction products** with polycyclic pigments **215247-95-3DP**, **reaction products** with heterocyclic compds.
RL: IMF (Industrial manufacture); PREP (Preparation)
(pigments, manufacture of, having good rheol. properties)

RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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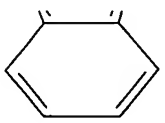
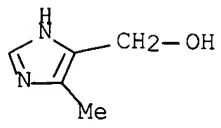


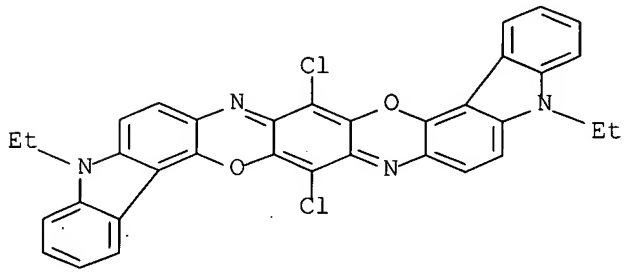
RN 38585-62-5 HCAPLUS

CN 1H-Imidazole-5-methanol, 4-methyl-, hydrochloride (1:1) (CA INDEX NAME)

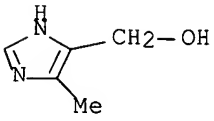


● HCl

RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)



IT **29636-87-1DP, 5-Hydroxymethyl-4-methylimidazole, reaction products** with quinacridone
RL: IMF (Industrial manufacture); PREP (Preparation)
(pigments, manufacture of, with good rheol. properties)
RN 29636-87-1 HCAPLUS
CN 1H-Imidazole-5-methanol, 4-methyl- (CA INDEX NAME)



L81 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1982:36853 HCAPLUS Full-text
DN 96:36853
TI Dyes containing imidazolylmethyl groups and their use
IN Patsch, Manfred; Ruske, Manfred
PA BASF A.-G., Ger. Dem. Rep.
SO Eur. Pat. Appl., 93 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 34725	A2	19810902	EP 1981-100672	19810130

	EP 34725	A3	19820804		
	EP 34725	B1	19840725		
	R: BE, CH, DE, FR, GB, IT				
	DE 3006013	A1	19810820	DE 1980-3006013	19800218
	DE 3044563	A1	19820708	DE 1980-3044563	19801126
PRAI	DE 1980-3006013	A	19800218		
	DE 1980-3044563	A	19801126		

OS MARPAT 96:36853
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Dyes of general structure I are prepared, where Q represents a dye residue (e.g. azo, phthalocyanine, anthraquinone, indigo, quinophthalone), R = H, C1-6 alkyl, or C2-6 alkenyl, R1 and R2 (independently) = H, C1-5 alkyl, or C2-5 alkenyl, R3 = C1-22 alkyl or C2-4 hydroxyalkyl, X- = anion, m = 0-5, n = 0-5, and $1 \leq (m + n) \leq 5$. I, which exhibit high substantivity on paper, are prepared by reaction of QHm+n with C-(hydroxymethyl)imidazoles or with imidazoles and HCHO in the presence of acid. Typical dyes are red II [80043-75-0], yellow III [80032-88-8], and red IV [79554-27-1].

IC C09B0069-00; D06P0001-02; D06P0001-41; D21H0003-80

CC 41-1 (Dyes, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 43

IT 116-71-2DP, reaction product with formaldehyde and 1-methylimidazole
128-64-3DP, reaction product with formaldehyde and 1-methylimidazole
1739-84-0DP, reaction products with azo dye and formaldehyde
4197-25-5DP, reaction products with **5-(hydroxymethyl)-4-methylimidazole** hydrochloride and sulfuric acid
38585-62-5DP, reaction products with C.I. Solvent Black 3 and sulfuric acid 79554-26-0P 79554-27-1P 79554-28-2P 79554-29-3P 79554-30-6P 79554-51-1P 79554-52-2P 79554-53-3P 79554-54-4P 79554-55-5P 79554-56-6P 79554-58-8P 79554-99-7P 80019-34-7DP, reaction products with formaldehyde and 4-methylimidazole 80032-59-3P 80032-60-6P 80032-68-4P 80032-69-5P 80032-70-8P 80032-71-9P 80032-74-2P 80032-76-4P 80032-78-6P 80032-80-0P 80032-81-1P 80032-82-2P 80032-83-3P 80032-84-4P 80032-85-5P 80032-86-6P 80032-87-7P 80032-88-8P 80043-78-3P 80043-79-4P 80043-81-8DP, sulfo derivative 80043-86-3P 80057-50-7P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye, manufacture of)

IT 82-20-2DP, reaction products with **5-(hydroxymethyl)-4-methylimidazole** 128-66-5DP, reaction products with 1-ethylimidazole and formaldehyde 128-70-1DP, reaction products with 1-ethylimidazole and formaldehyde 128-80-3DP, reaction products with **5-(hydroxymethyl)-4-methylimidazole**
129-09-9DP, reaction products with formaldehyde and 4-methylimidazole
522-75-8DP, reaction products with **5-(hydroxymethyl)-4-methylimidazole** 1072-63-5DP, reaction products with copper phthalocyanine and formaldehyde 7098-07-9DP, reaction products with copper phthalocyanine and formaldehyde, tetrachlorozincate
13435-22-8DP, reaction products with copper phthalocyanine and formaldehyde 14154-42-8DP, reaction products with formaldehyde and 1-methylimidazole 36947-68-9DP, reaction products with copper phthalocyanine and formaldehyde 52333-12-7DP, reaction products with **5-(hydroxymethyl)-4-methylimidazole**
79499-09-5DP, reaction products with **5-(hydroxymethyl**

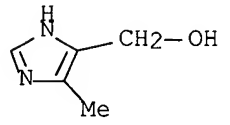
)-**4-methylimidazole** 80019-27-8DP, reaction products with 1,2-dimethylimidazole and formaldehyde
RL: MSC (Miscellaneous); PREP (Preparation)
(dyes, manufacture of)

IT 92-36-4DP, diazotized, coupling products with (4-methylimidazolyl)methylated N-benzyl-N-methylaniline **147-14-8DP**, imidazolylmethylated and quaternized derivs. 288-32-4DP, reaction products with copper phthalocyanine and formaldehyde 614-30-2DP, (4-methylimidazolyl) methylated, coupling products with diazotized 2-(4-aminophenyl)-6-methylbenzothiazole **29636-87-1DP**, **reaction products** with (dioxohydrindyl)benzoquinoline 66225-66-9DP, reaction products with formaldehyde and 4-methylimidazole 80019-20-1DP, reaction products with formaldehyde and 4-methylimidazole
RL: PREP (Preparation)
(paper dyes, manufacture of)

IT **38585-62-5DP**, **reaction products** with C.I. Solvent Black 3 and sulfuric acid
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(dye, manufacture of)

RN 38585-62-5 HCAPLUS

CN 1H-Imidazole-5-methanol, 4-methyl-, hydrochloride (1:1) (CA INDEX NAME)



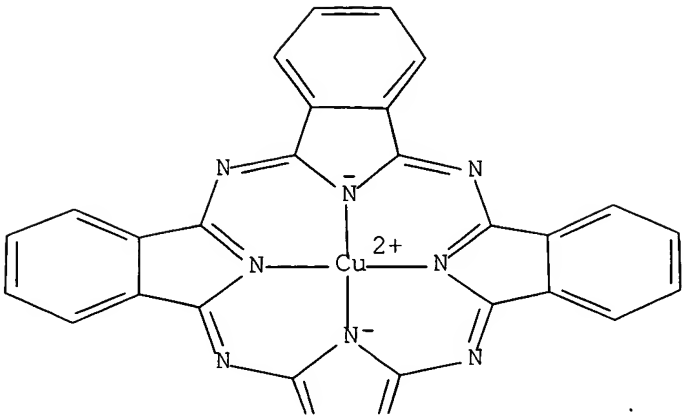
● HCl

IT **147-14-8DP**, imidazolylmethylated and quaternized derivs. **29636-87-1DP**, **reaction products** with (dioxohydrindyl)benzoquinoline
RL: PREP (Preparation)
(paper dyes, manufacture of)

RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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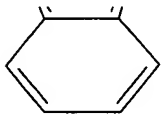
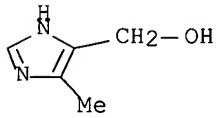


RN 29636-87-1 HCAPLUS
CN 1H-Imidazole-5-methanol, 4-methyl- (CA INDEX NAME)



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L82 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:1210085 HCAPLUS Full-text
DN 147:477693
TI Color photoresist transfer materials suppressing reticulation, color filters and their manufacture, and displays therewith
IN Serizawa, Shinichiro
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 29pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007279467	A	20071025	JP 2006-107029	20060410
PRAI	JP 2006-107029		20060410		

AB The title materials comprise supports, color resist layers, intermediate layers, and cover films, where the intermediate layers contain ≥2 resins including those from unsatd. maleic acid, (meth)acrylic acid, and/or its anhydride, acrylate esters, and ethylenically unsatd. hydrocarbons. The intermediate layers provide uniform adhesion between the cover films and the resist layers, thus allowing defect-free transfer of the resist layers. Color filters forming filter elements and/or black matrixes with the color resist layers transferred from the above materials, are also claimed.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383, color filter elements; color photoresist transfer materials forming modified polyolefin-containing intermediate layers for forming color filters)

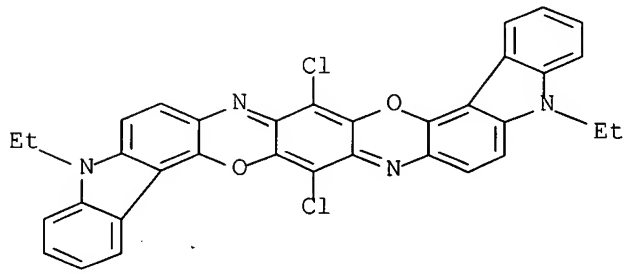
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383, color filter elements; color photoresist transfer materials forming modified polyolefin-containing intermediate layers for forming color filters)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

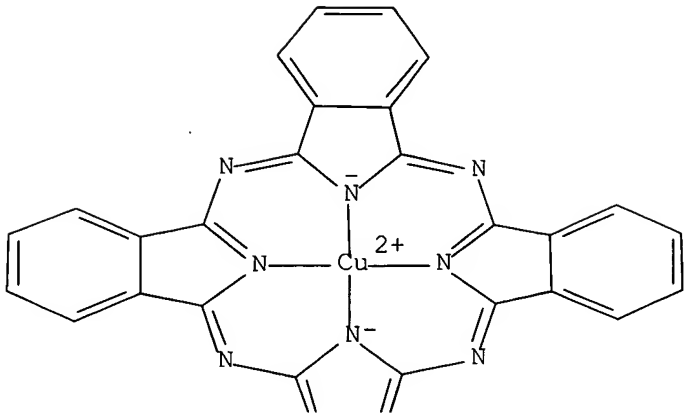
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



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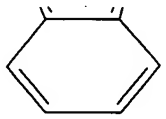


L82 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:1089780 HCAPLUS Full-text
DN 147:408531
TI Cleaning treatment liquid composition useful for color filter producing process
IN Masuda, Toshiyuki; Tanaka, Mitsutoshi
PA Fujifilm Corporation, Japan
SO PCT Int. Appl., 33pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007108186	A1	20070927	WO 2006-JP324768	20061212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM

	JP 2007254510	A	20071004	JP 2006-77737	20060320
PRAI	JP 2006-77737	A	20060320		

AB The composition contains: (A) a basic compound, (B) ≥1 surfactant selected from an acetylene surfactant having ≥1 hydroxy, alkyl ether surfactant, and phenoxyoxyalkylene surfactant, and (C) a naphthalene surfactant. A typical composition comprised hydroxy group-containing alkyl ended ethoxylated phenol 0.3, Pelex NBL (sodium (1,1-dimethylethyl)- naphthalenesulfonate) 1.4, sodium carbonate monohydrate 0.7, sodium hydrocarbonate 0.3, ans water 97.3 parts.

CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 73, 74

IT **271582-84-4, CF Blue EX 3357**
RL: MOA (Modifier or additive use); USES (Uses)
(CF Blue EX 3383; cleaning treatment liquid composition useful for color filter producing process)

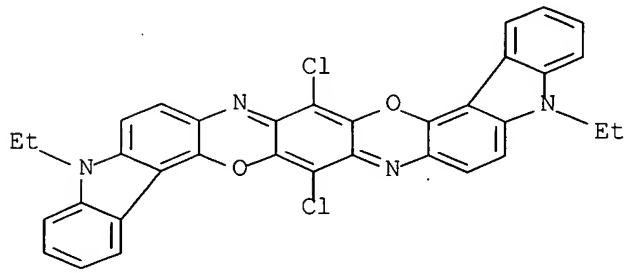
IT **271582-84-4, CF Blue EX 3357**
RL: MOA (Modifier or additive use); USES (Uses)
(CF Blue EX 3383; cleaning treatment liquid composition useful for color filter producing process)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

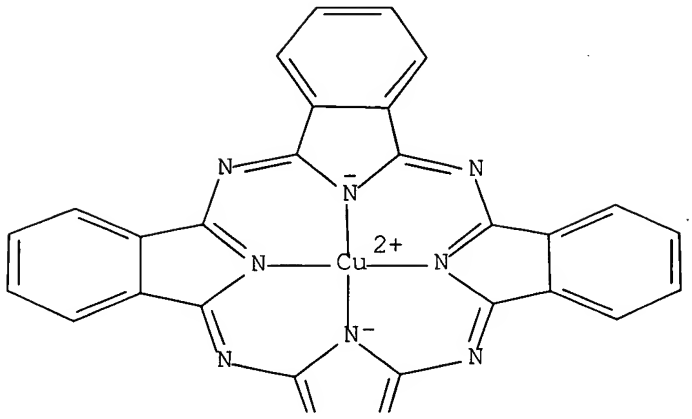
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



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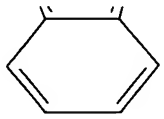


.RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Asahi Chemical Co Ltd	1999			JP 11-106799 A	HCAPLUS
Fuji Photo Film Co Ltd	2002			JP 2002351091 A	HCAPLUS
Fuji Photo Film Co Ltd	2003			JP 2003005382 A	HCAPLUS
Fuji Photo Film Co Ltd	2003			JP 2003336097 A	HCAPLUS
Fuji Photo Film Co Ltd	2005			EP 1503247 A2	HCAPLUS
Fuji Photo Film Co Ltd	2005			EP 1553455 A2	HCAPLUS
Fuji Photo Film Co Ltd	2005			US 20050026092 A1	
Fuji Photo Film Co Ltd	2005			US 20050136362 A1	HCAPLUS
Fuji Photo Film Co Ltd	2005			JP 2005049542 A	HCAPLUS
Fuji Photo Film Co Ltd	2005			JP 2005146171 A	HCAPLUS
Fuji Photo Film Co Ltd	2005			JP 2005196143 A	HCAPLUS
Fuji Photo Film Co Ltd	2005			JP 2005202392 A	HCAPLUS
Hitachi Chemical Co Ltd	1999			JP 11-258819 A	HCAPLUS
Kao Corp	1995			JP 07-041974 A	HCAPLUS
Lion Corp	1998			JP 10-219283 A	HCAPLUS

L82 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:873390 HCAPLUS Full-text
DN 147:265924
TI Liquid crystal display device and color film plate, and processes for producing the same
IN Aiki, Yasuhiro; Morishima, Shinichi; Sato, Morimasa; Ichihashi, Mitsuyoshi
PA Fujifilm Corporation, Japan

SO PCT Int. Appl., 133pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007089040	A1	20070809	WO 2007-JP52293	20070202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2007233376	A	20070913	JP 2007-22983	20070201
PRAI JP 2006-26706	A	20060203		

AB A novel liquid crystal display device is disclosed. The liquid crystal display device comprises a first substrate, a second substrate, liquid crystal held between the first substrate and the second substrate, patterned layers divided into fine areas, disposed on the first substrate, comprising at least a patterned color filter layer and a patterned first optically anisotropic layer laminated in the direction of the normal line of the substrate, and a barrier wall disposed at a boundary portion of the adjacent fine areas of the patterned layers.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; liquid crystal display device and color film plate, and processes for producing the same)

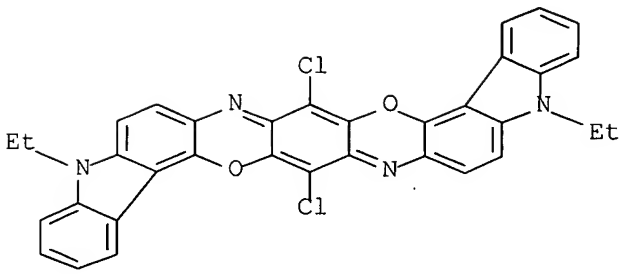
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; liquid crystal display device and color film plate, and processes for producing the same)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

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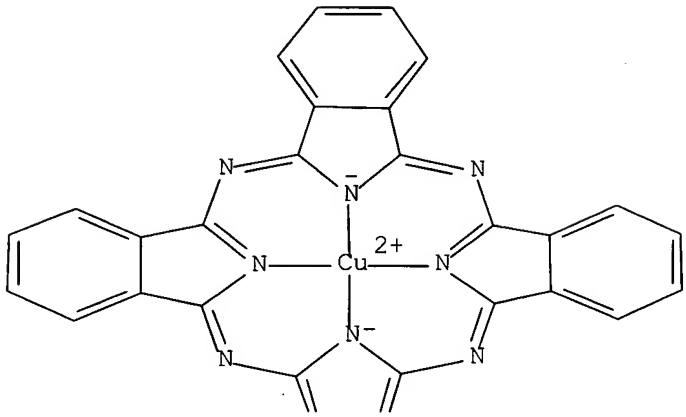

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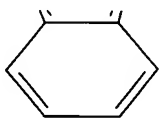


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Dai Nippon Printing Co	2004			US 20040156001 A1	HCAPLUS
Dai Nippon Printing Co	2004			JP 2004240102 A	HCAPLUS
Dai Nippon Printing Co	2004			US 20060203164 A1	

Dai Nippon Printing Co	2005		JP 2005003733 A	HCAPLUS
Dai Nippon Printing Co	2005		JP 2005275321 A	HCAPLUS
Nitto Denko Corporation	2006		WO 2005116741 A1	HCAPLUS
Nitto Denko Corporation	2006		JP 2006011369 A	HCAPLUS
Nitto Denko Corporation	2006		US 20060170848 A1	
Seiko Epson Corp	2006		US 20060008930 A1	HCAPLUS
Seiko Epson Corp	2006		JP 2006023462 A	HCAPLUS

L82 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:787755 HCAPLUS Full-text
DN 147:177272
TI Color filter, its manufacturing method, and liquid crystal display device
IN Terashima, Naohisa; Ito, Hideaki; Tanaka, Mitsutoshi; Nakamura, Hideyuki
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 37pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

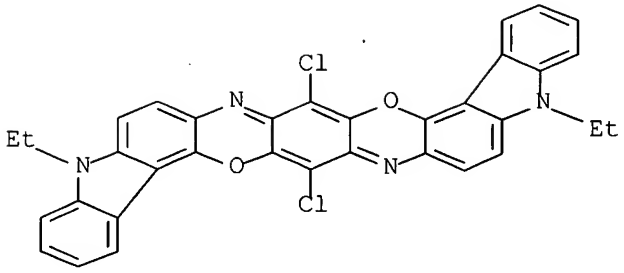
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007183513	A	20070719	JP 2006-3017	20060110
PRAI	JP 2006-3017		20060110		

AB The method comprises forming a light-insulating barrier rib on a substrate, spraying red, green, and blue ink to areas separated by the barrier rib for forming a red, green, and blue colored layer. Each ink is polymerizable ink containing a colorant, a polymerizable compound and a polymerization initiator, in which solid content is ≥50 weight%. The red ink contains C.I.P.R. 254 0.80-0.96 g/m2 and C.I.P.R. 177 0.20-0.24 g/m2, the green ink contains C.I.P.G. 36 0.90-1.34 g/m2 and C.I.P.Y. 150 0.38-0.58 g/m2, and blue ink contains C.I.P.B. 15:6 0.59-0.67 g/m2 and C.I.P.V. 23 0.065-0.075 g/m2. The color filter manufactured by the method, has ≥2 colored pixels. The liquid crystal device with the color filter is also claimed. The method forms images with precise position and without color mixture, providing the color filter with broad color reproduction range and high contrast ratio, manufactured at low cost and high productivity.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 41
IT **271582-84-4** 944110-92-3 944110-93-4
RL: TEM (Technical or engineered material use); USES (Uses)
(color filter using polymerizable ink for liquid crystal display)
IT **271582-84-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(color filter using polymerizable ink for liquid crystal display)
RN 271582-84-4 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

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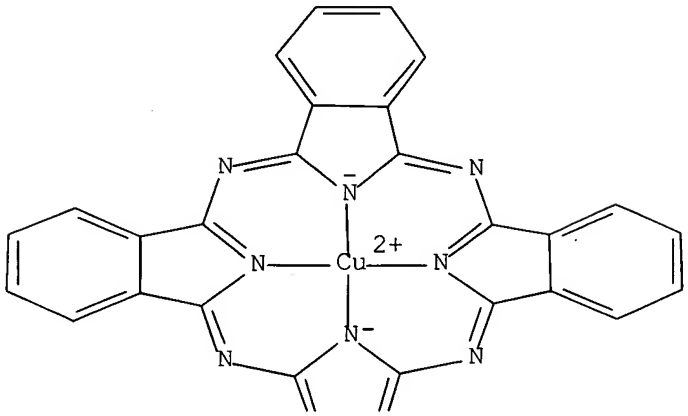

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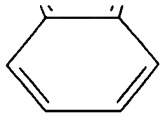


L82 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:759140 HCAPLUS Full-text
DN 147:154149
TI Transfers, manufacture of color filter substrates using the transfers, the thus manufactured substrates, and liquid crystal displays
IN Ito, Korenari

PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 44pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007178448	A	20070712	JP 2005-373316	20051226
PRAI JP 2005-373316		20051226		

AB The transfer comprises ≥1 temporal support(s) equipped with ≥1 optically anisotropic layer and ≥1 photosensitive layer made of polymers with average acid value 10-90. The title color filter substrate is manufactured by lamination of the said transfer onto a substrate, removal of the temporal support from the transfer, exposure of the photosensitive layer, and development by removal of the unnecessary photosensitive layer and anisotropic layer. The thus manufactured color filters and liquid crystal displays including the filters are also claimed. Displays with wide color view angles are obtained.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 4051-63-2, C.I. Pigment Red 177 14302-13-7, C.I. Pigment Green 36 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer 77641-99-7, Kayarad DPHA 84632-65-5, C.I. Pigment Red 254 **271582-84-4, CF Blue EX 3357** 923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(in photosensitive layer; transfers with optically anisotropic layers and photosensitive layers for manufacture of color filter substrates in liquid crystal displays)

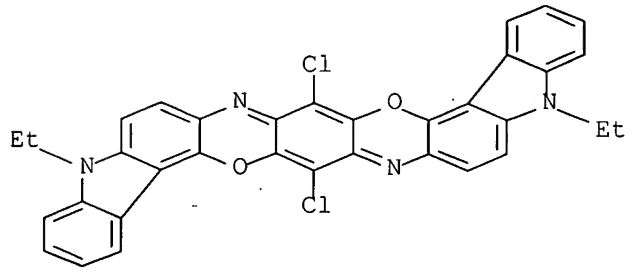
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(in photosensitive layer; transfers with optically anisotropic layers and photosensitive layers for manufacture of color filter substrates in liquid crystal displays)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

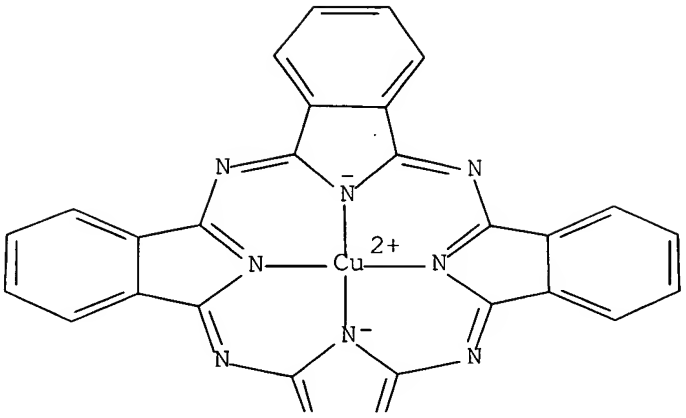
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



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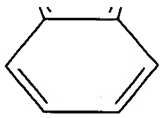

L82 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:757536 HCAPLUS Full-text
DN 147:154140
TI Inks, color filters and production method thereof, and displays
IN Gotoh, Hidenori
PA Fujifilm Corporation, Japan
SO PCT Int. Appl., 67pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007077738	A1	20070712	WO 2006-JP325379	20061220
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP,				

KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2007177179 A 20070712 JP 2005-380197 20051228

PRAI JP 2005-380197 A 20051228

AB The inks contain ≥1 monomer and/or an oligomer, and a coloring agent. The coloring agent contains 16-56% of a pigment C.I. P.R. 254 and 4-14% of a pigment C.I.P.R. 177 relative to the solid content of the inks. Alternatively, the coloring agent contains 14-49% of a pigment C.I.P.G. 36 and 6-21% of a pigment C.I.P.Y. 150 relative to the solid content of the inks. Still alternatively, the coloring agent contains 19-51% of a pigment C.I.P.B. 15:6 and 1.0-2.7% of a pigment C.I.P.V. 23 relative to the solid content of the inks. The inks are used for formation of red, green and blue pixels of color filers for liquid crystal displays.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 42

IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; inks for production of color filters for liquid crystal displays)

IT **215247-95-3, C.I. Pigment Violet 23**
RL: TEM (Technical or engineered material use); USES (Uses)
(**Hostaperm Violet RL-NF**; inks for production of color filters for liquid crystal displays)

IT **147-14-8, C.I. Pigment Blue 15:6** 923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(inks for production of color filters for liquid crystal displays)

IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; inks for production of color filters for liquid crystal displays)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
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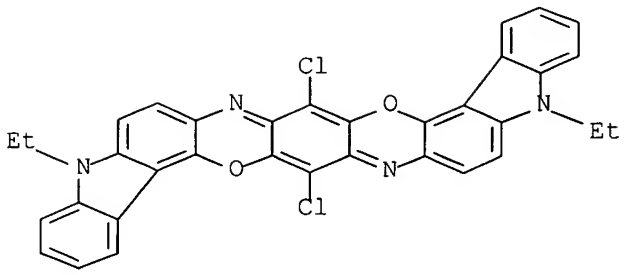

CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

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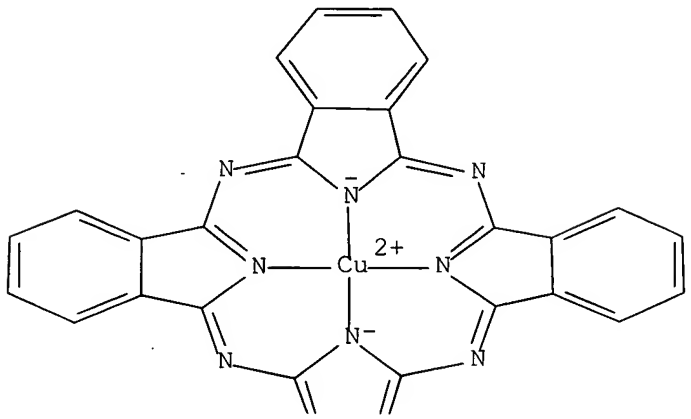

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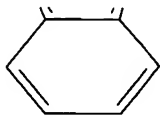
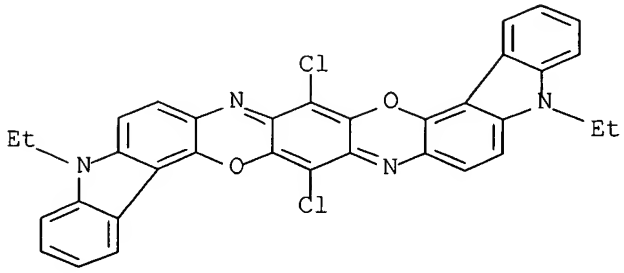


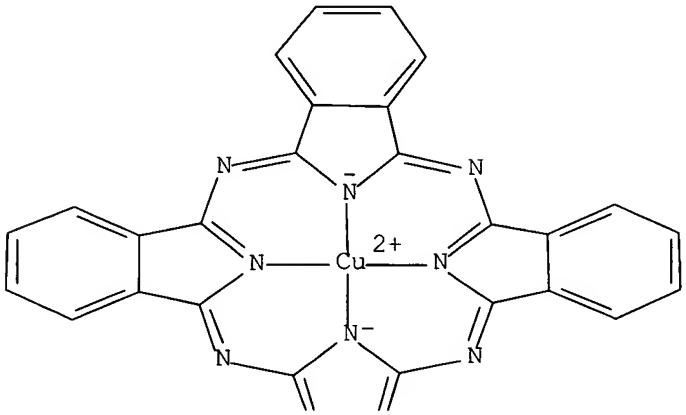
IT **215247-95-3, C.I. Pigment Violet 23**
RL: TEM (Technical or engineered material use); USES (Uses)
(**Hostaperm Violet RL-NF**; inks for production of color filters for liquid crystal displays)
RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-

dihydro- (CA INDEX NAME)



IT **147-14-8, C.I. Pigment Blue 15:6**
RL: TEM (Technical or engineered material use); USES (Uses)
(inks for production of color filters for liquid crystal displays)
RN 147-14-8 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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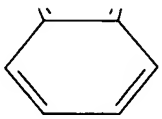


RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File

Chisso Corp	2001			JP 2001163951 A	HCAPLUS
Dainippon Printing Co L	2004			JP 2004339333 A	HCAPLUS
Dainippon Printing Co L	2004			JP 2004339358 A	HCAPLUS
Dainippon Printing Co L	2004			JP 2004339367 A	HCAPLUS
Hitachi Chemical Co Ltd	2005			JP 2005105114 A	HCAPLUS

L82 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:589043 HCAPLUS Full-text
DN 147:19835
TI Liquid crystal displays showing improved viewing angle characteristics, their substrates, and manufacture thereof
IN Kaneiwa, Hideki; Kaneko, Wakahiko; Tomita, Hidetoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 49pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007133279	A	20070531	JP 2005-328293	20051114
PRAI JP 2005-328293		20051114		

AB The process involves these steps; exposing substrates having photosensitive resin layers and optically anisotropic layers, developing, bringing the substrates into contact with adhesive substances (e.g., tapes), and peeling the substances to remove the said layers partially and remain patterns. The optically anisotropic layers may be formed from liquid crystal compound-containing coatings and show mesophase which is fixed by heat treatment or actinic ray irradiation Thus, LCD substrates equipped with a function as color filters having optically anisotropic layers, can be fabricated in a simple process.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 75

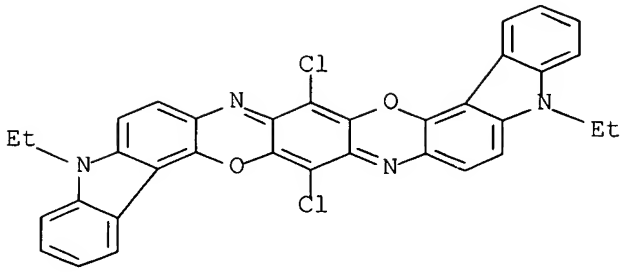
IT **271582-84-4, CF Blue EX 3357**
RL: MOA (Modifier or additive use); USES (Uses)
(CF Blue EX 3383, color filter pigments; manufacture of LCD substrates with optically anisotropic layer-formed color filters without increasing number of process steps)

IT **271582-84-4, CF Blue EX 3357**
RL: MOA (Modifier or additive use); USES (Uses)
(CF Blue EX 3383, color filter pigments; manufacture of LCD substrates with optically anisotropic layer-formed color filters without increasing number of process steps)

RN 271582-84-4 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

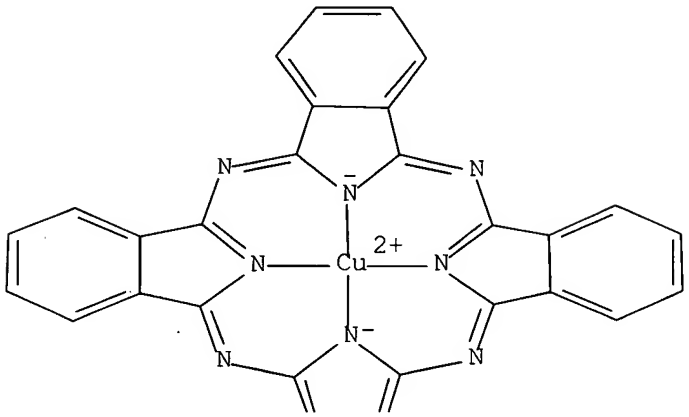
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



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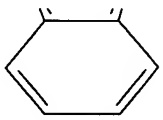


L82 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:561335 HCAPLUS Full-text
DN 146:510641
TI Photosensitive compositions for color filters, the color filters, method for their manufacture, and liquid crystal displays
IN Serizawa, Shinichiro

PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 57pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007127818	A	20070524	JP 2005-320123	20051102
PRAI JP 2005-320123		20051102		

AB The title compns., for 2-dimensional imaging by their scanning with modulated beam, contain binders, monomers or oligomers, and photoinitiators and show ±10% thickness change by exposure under 3-50 mJ/cm2. Color filters are manufactured by application of the said composition onto a substrate, followed by exposure under 3-50 mJ/cm2 and development. Also claimed are color filters prepared by the method and liquid crystal displays equipped with such filters. Patterns with excellent profiles are obtained by short scanning period.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73

IT 4051-63-2 14302-13-7, GT-2 84632-65-5, Irgaphor Red B-CF
271582-84-4, CF Blue EX-3357
RL: TEM (Technical or engineered material use); USES (Uses)
(dye; photosensitive compns. for preparation of color filters for displays by modulated beam scanning)

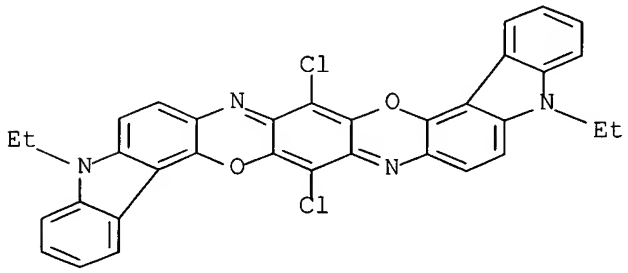
IT **271582-84-4, CF Blue EX-3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(dye; photosensitive compns. for preparation of color filters for displays by modulated beam scanning)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

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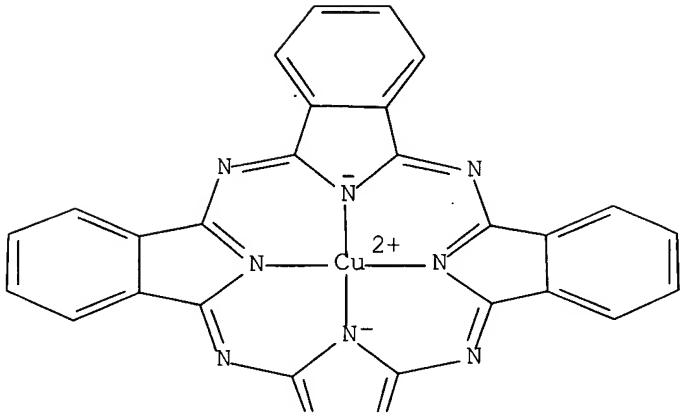

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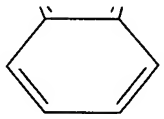


L82 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:327815 HCAPLUS Full-text
DN 146:326781
TI Formation of patterns with smooth edge line by laser direct imaging, color filters having the patterns, and liquid crystal displays having the filters
IN Minami, Kazumori; Tanaka, Mitsutoshi; Okazaki, Yoji; Sumi, Katsuhito; Mushano, Mitsuru
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 97pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007071957	A	20070322	JP 2005-256238	20050905
PRAI	JP 2005-256238		20050905		

AB The pattern formation method involves (A) depositing a photoimaging layer comprising binders, polymerizable compds., photoinitiators, and pigments on a substrate, (B) imagewise exposing the layer by scanning with an exposure head having two-dimensionally aligned light sources, and (C) developing the exposed layer with an agent at pH 8-13, wherein, in the developing process, the surface portion of the non-exposed part of the photoimaging layer retains for ≥3 s. The exposure head is characterized in that the lines of the light

sources have a certain angle to the scanning direction. The exposure head may be equipped with digital micromirror devices (DMD). Serrated edges on patterned layers are prevented with this invention.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

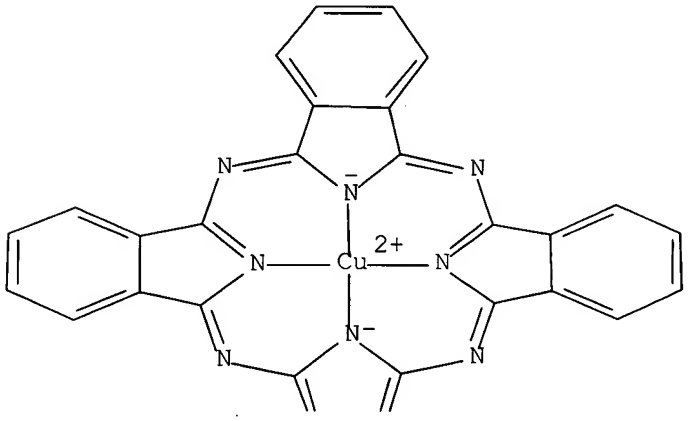
IT **147-14-8, C.I. Pigment Blue 15:6** 4051-63-2, C.I. Pigment Red 177 14302-13-7, C.I. Pigment Green 36 17527-29-6 26403-58-7 50858-51-0 77641-99-7, Kayarad DPHA 84632-65-5, C.I. Pigment Red 254 **271582-84-4, CF Blue EX 3357** 872613-79-1, C.I. Pigment Yellow 150 923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(formation of patterns with smooth edge line by laser direct imaging for LCD color filters)

IT **147-14-8, C.I. Pigment Blue 15:6 271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(formation of patterns with smooth edge line by laser direct imaging for LCD color filters)

RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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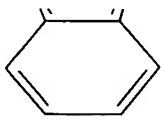


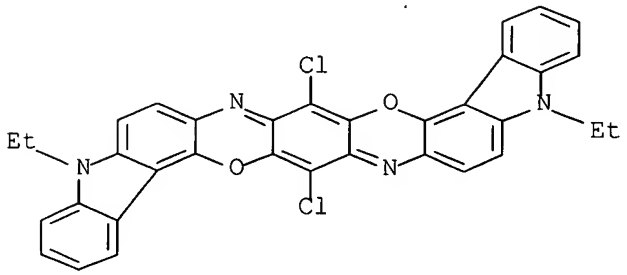
RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka

ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

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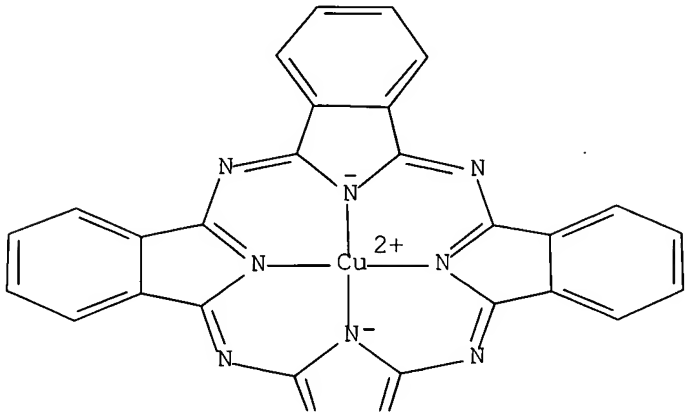

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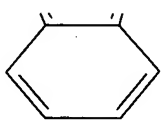


L82 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:169990 HCAPLUS Full-text
DN 146:262598
TI Photosensitive compositions, photosensitive films, mask-less manufacture of color filters, and their color filters and LCD
IN Yoshinari, Shinichi; Sawano, Mitsuru; Sato, Morimasa
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 93pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007041282	A	20070215	JP 2005-225311	20050803
PRAI	JP 2005-225311		20050803		

AB The photosensitive compns. contain at least photopolymn. initiators, ethylenically reactive group-containing photopolymerizable compds., and nonphotosensitive curable components which do not contribute photocuring reaction, wherein the photosensitive compns. give photosensitive layers having variation in spectral sensitivity -8 to +8% corresponding to ±10 nm change from the center value of laser irradiation wavelength and the photosensitive layers are subjected to relative scanning while light is modulated by using an aligner having ≥2 laser heads. Preferably, the nonphotosensitive curable components comprise macromol. compds. free from crosslinkable groups, colorants, or inorg. fillers. The photosensitive films are prepared by applying the photosensitive compns. on substrates and subsequently by drying. The photosensitive compns. are applied on substrates and dried to give photosensitive films, which are exposed to light and developed to give color filters for LCD. In another alternative, the photosensitive films are laminated on substrate's surface upon heat or pressure, exposed to light, and developed to give color filters. The photosensitive compns. may be pigmented with black (K). In another alternative, photosensitive compns. may be pigmented with red (R), green (G), or blue (B) and color filters are formed by preparation photosensitive layers, light irradiation, and development on a substrate and for each RGB color in order. Preferably, the red (R) colorants comprise C.I. Pigment Red 254, the green (G) colorants comprise C.I. Pigment Green 36 and/or C.I. Pigment Yellow 139, and the blue (B) colorants comprise **C.I. Pigment Blue 15:**
6. In another alternative, the red (R) colorants comprise C.I. Pigment Red 254 and/or C.I. Pigment Red 177, the green (G) colorants comprise C.I. Pigment Green 36 and/or C.I. Pigment Yellow 150 (B) , and the blue (B) colorants comprise **C.I. Pigment Blue 15:6** and/or **C.I. Pigment Violet 23.**

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; photosensitive compns. and their photosensitive films for mask-less manufacture of color filters for LCD)

IT **147-14-8, C.I. Pigment Blue 15:6** 4051-63-2, C.I. Pigment Red 177 9003-20-7D, Poly(vinyl acetate), partially saponified 14302-13-7, C.I. Pigment Green 36 25085-34-1, Acrylic acid-styrene copolymer 36888-99-0, C.I. Pigment Yellow 139 41637-38-1, 2,2-Bis[4-(methacryloxypolyethoxy)phenyl]propane] 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer 72145-60-9,

Benzyl methacrylate-methacrylic acid-methyl methacrylate copolymer 77641-99-7, Kayarad DPHA 84632-65-5, C.I. Pigment Red 254 120659-23-6, Benzyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-methyl methacrylate copolymer **215247-95-3, C.I. Pigment Violet 23** 872613-79-1, C.I. Pigment Yellow 150 923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive compns. and their photosensitive films for mask-less manufacture of color filters for LCD)

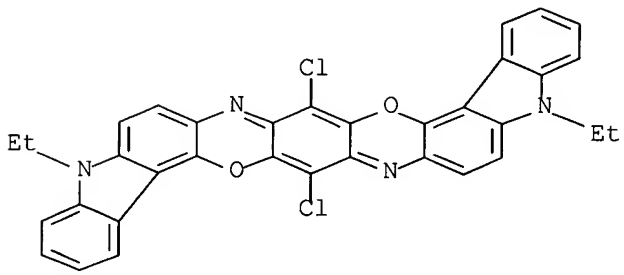
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(CF Blue EX 3383; photosensitive compns. and their photosensitive films for mask-less manufacture of color filters for LCD)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

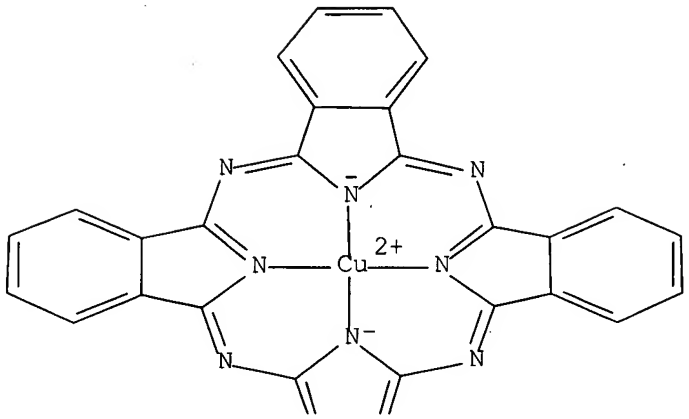
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



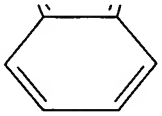
CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



PAGE 2-A

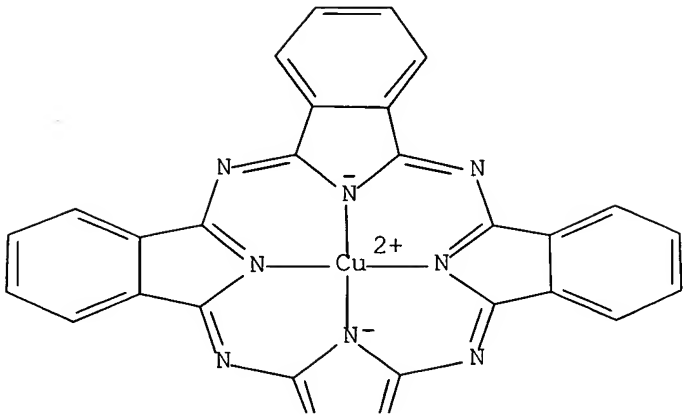


IT **147-14-8, C.I. Pigment Blue 15:6 215247-95-3, C.I. Pigment Violet 23**
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive compns. and their photosensitive films for mask-less manufacture of color filters for LCD)

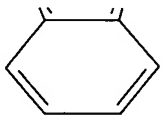
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

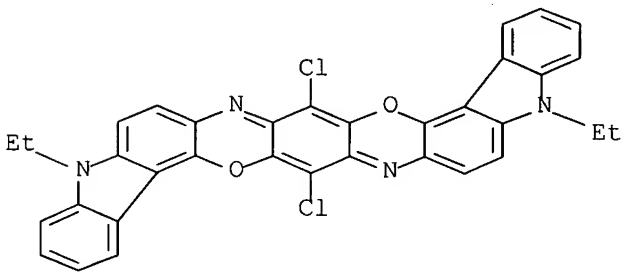
PAGE 1-A



PAGE 2-A



RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)



L82 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:169917 HCAPLUS Full-text
DN 146:238939
TI Photosensitive resin composition for making color filter used in liquid crystal display and production method of color filter
IN Kashiwagi, Daisuke; Tanaka, Mitsutoshi; Matsumoto, Hirotaka
PA Fujifilm Holdings Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 73pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2007041082	A	20070215	JP 2005-222269	20050729
PRAI	JP 2005-222269		20050729		

OS MARPAT 146:238939

AB The invention relates to a photosensitive resin composition for making a color filter used in a liquid crystal display (LCD), comprising (A) binders, (B) an ethylenic unsatd. compds. (C) photoinitiators including hexaarylbiimidazoles, and (D) spectral sensitizers. The high definition images are realized by exposing the photosensitive resin composition to the 350-420 nm light through a 2-dimensionally arranged spatial modulator with the scanning speed of 5-3000 mm/s.

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38, 42, 74

IT 4051-63-2, C.I. Pigment Red 177 14302-13-7, C.I. Pigment Green 36
77641-99-7, Kayarad DPHA 84632-65-5, C.I. Pigment Red 254
271582-84-4, CF Blue EX 3357
923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive resin composition for making color filter used in liquid crystal display)

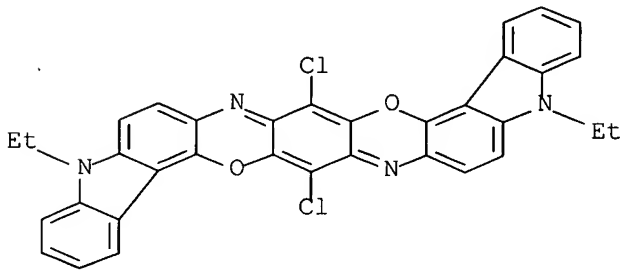
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive resin composition for making color filter used in liquid crystal display)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

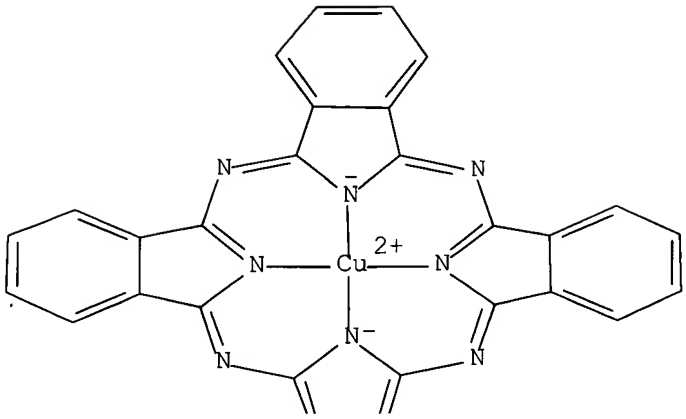
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



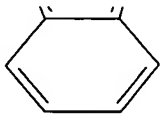
CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



PAGE 2-A



L82 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:145210 HCAPLUS Full-text
DN 146:216088
TI Color filter forming material, and manufacturing method of color filter for liquid crystal display
IN Nakamura, Hideyuki; Matsumoto, Kazuhiko; Sumi, Katsuhito
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 95pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2007033923	A	20070208	JP 2005-217739	20050727
PRAI JP 2005-217739		20050727		

AB The invention relates to a color filter forming material, suited for use in making a color filter equipped to a liquid crystal display, using a maskless lithog. method, comprising a binder, a polymerizable material, a photoinitiator, and a coloring agent. The light-sensitive layer made of the color filter forming material is characterized in that the photosensitivity is 0.1-100 mJ/cm2, the thickness of the developed light-sensitive layer that is irradiated by the 100-55% exposure value of the photosensitivity is 90-110 % of the initial thickness of the light-sensitive layer, and the thickness of

the developed light-sensitive layer irradiated by the 45% exposure value is ≤ 10 % of the initial thickness of the light-sensitive layer.

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 74

IT 4051-63-2, C.I. Pigment Red 177 14302-13-7, C.I. Pigment Green 36 43135-91-7D, 2H-Benzimidazol-2-one, derivs. 65697-21-4, Benzyl methacrylate-methacrylic acid copolymer 72145-60-9, Benzyl methacrylate-methacrylic acid-methyl methacrylate copolymer 77641-99-7, Kayarad DPHA 84632-65-5, C.I. Pigment Red 254 **271582-84-4, CF Blue EX 3357** 682350-53-4, Plaad ED 152 923571-93-1, CF Yellow EX 3393
RL: TEM (Technical or engineered material use); USES (Uses)
(color filter forming material making color filter for liquid crystal display)

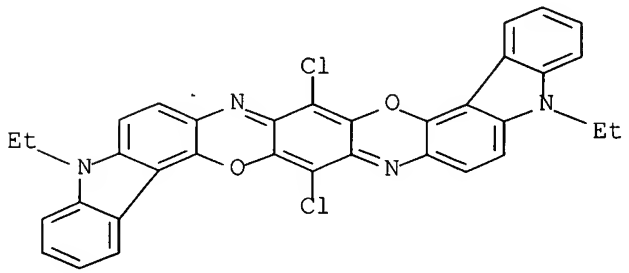
IT **271582-84-4, CF Blue EX 3357**
RL: TEM (Technical or engineered material use); USES (Uses)
(color filter forming material making color filter for liquid crystal display)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

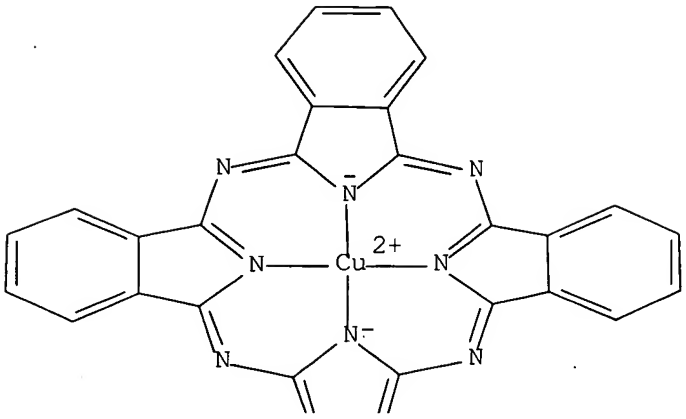
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



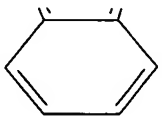
CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



PAGE 2-A



L82 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:53378 HCAPLUS Full-text
DN 144:139082
TI Color filter, its manufacture, and its use in liquid crystal display
IN Sato, Morimasa; Tanaka, Mitsutoshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 92 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006018221	A	20060119	JP 2005-67982	20050310
PRAI	JP 2004-163391	A	20040601		

AB The filter is manufactured by (1) forming a photosensitive layer on a substrate with a composition containing binders, polymerizable compds., colorants, and photopolymn. initiators, (2) modulating light from a light irradiation means with an optical modulator having n number of pixel-drawing parts and exposing the photosensitive layer with light passed through a microlens array having (a) arranged nonspherical microlenses capable of correcting aberration caused by strain of outputting surface in the pixel drawing parts or (b) arranged microlenses having aperture through which light from the surrounding parts of the pixel-drawing parts can not be income, and (3) developing the exposed photosensitive layer. The method suppresses

unevenness of the color filter, and the filter is suitable for liquid crystal displays, portable game machines, notebook PC, television monitors, etc.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 73

IT **271582-84-4**, CF Blue EX 3383
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(**CF Blue EX 3357**, filter colored with; color filter and its manufacture by exposing photosensitive layer with modulated and microlens array-passed light for liquid crystal display)

IT **147-14-8, C.I. Pigment Blue 15:6** 4051-63-2, C.I. Pigment Red 177 **215247-95-3, C.I. Pigment Violet 23** 872613-79-1, C.I. Pigment Yellow 150
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(filter colored with; color filter and its manufacture by exposing photosensitive layer with modulated and microlens array-passed light for liquid crystal display)

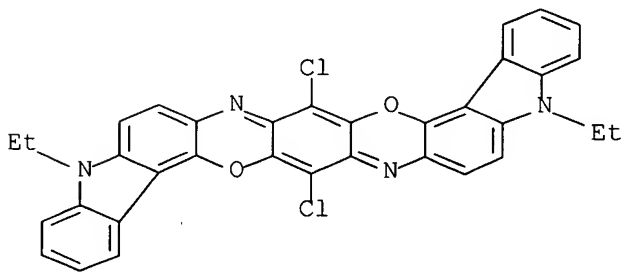
IT **271582-84-4**, CF Blue EX 3383
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(**CF Blue EX 3357**, filter colored with; color filter and its manufacture by exposing photosensitive layer with modulated and microlens array-passed light for liquid crystal display)

RN 271582-84-4 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2

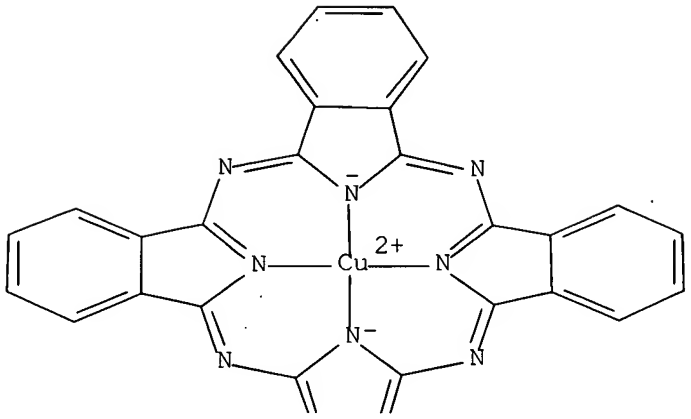


CM 2

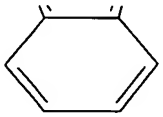
CRN 147-14-8
CMF C32 H16 Cu N8

CCI CCS

PAGE 1-A



PAGE 2-A

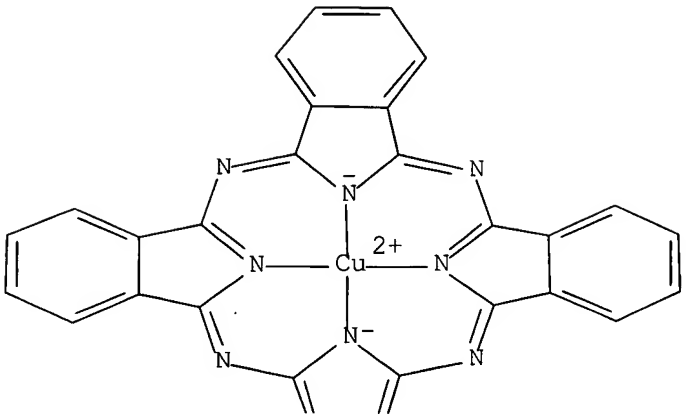


IT **147-14-8, C.I. Pigment Blue 15:6 215247-95-3, C.I. Pigment Violet 23**
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(filter colored with; color filter and its manufacture by exposing photosensitive layer with modulated and microlens array-passed light for liquid crystal display)

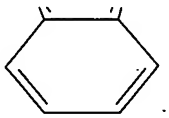
RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

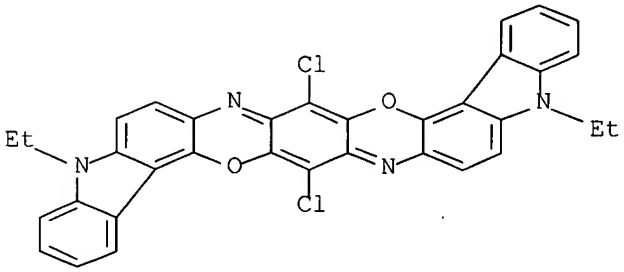
PAGE 1-A



PAGE 2-A



RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)



L82 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:351232 HCAPLUS Full-text
DN 133:5965
TI Pigments as ink additives for improving wear resistance of writing and printing devices, and ink compositions containing the additives
IN Piel, Merten
PA Rotring International Gmbh & Co Kg, Germany
SO Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW

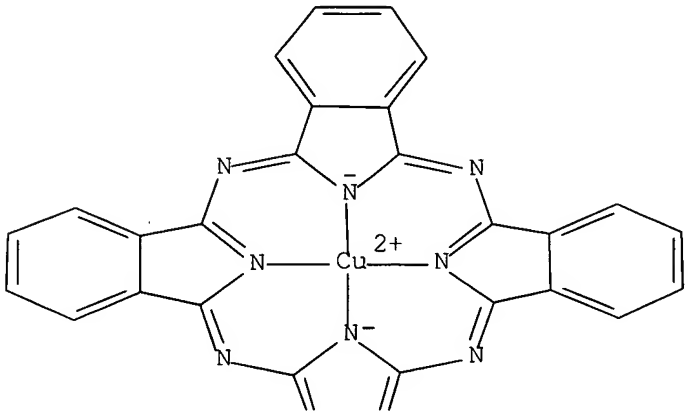
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1002841	A2	20000524	EP 1999-250389	19991103
	EP 1002841	A3	20010502		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19855014	A1	20000525	DE 1998-19855014	19981120
	KR 2000035518	A	20000626	KR 1999-50990	19991117
	JP 2000160090	A	20000613	JP 1999-331061	19991122
PRAI	DE 1998-19855014	A	19981120		

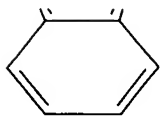
AB Wear resistance of title devices, e.g., ball-point pens, is improved by adding carbon black, especially channel carbon black, furnace carbon black or lamp black (<0.1% based on ink composition) or organic pigments, especially azo or phthalocyanine pigments or their mixts. (<1.0% based on ink composition) to the ink composition

IC ICM C09D0011-16
ICS C09D0011-02
CC 42-11 (Coatings, Inks, and Related Products)
IT **147-14-8**, Hostafine Blue B 2G 3520-42-1, Duasyn Acid Rhodamine B 01 122464-59-9, Bayscript Black SP **215247-95-3**, **Pigment Violet 23 271582-84-4**, **Flexonyl Violet RL-LA**
RL: TEM (Technical or engineered material use); USES (Uses)
(pigment; pigments as ink additives for improving wear resistance of writing and printing devices)
IT **147-14-8**, Hostafine Blue B 2G **215247-95-3**, **Pigment Violet 23 271582-84-4**, **Flexonyl Violet RL-LA**
RL: TEM (Technical or engineered material use); USES (Uses)
(pigment; pigments as ink additives for improving wear resistance of writing and printing devices)
RN 147-14-8 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.kappa.N32]-, (SP-4-1)- (CA INDEX NAME)

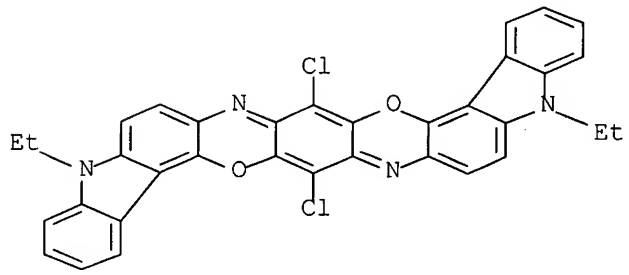
PAGE 1-A



PAGE 2-A



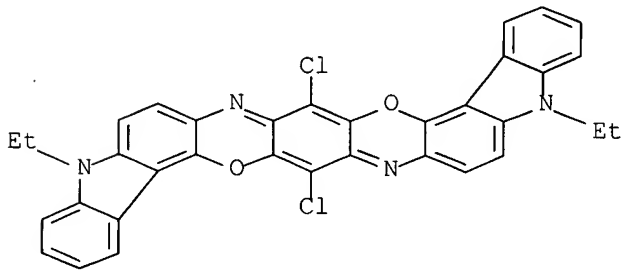
RN 215247-95-3 HCAPLUS
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)



RN 271582-84-4 HCAPLUS
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI) (CA INDEX NAME)

CM 1

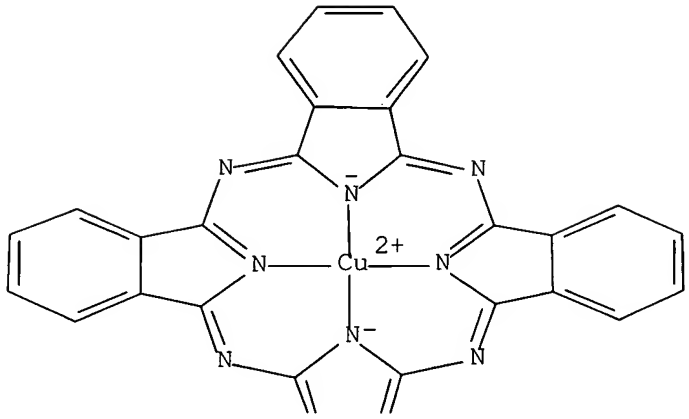
CRN 215247-95-3
CMF C34 H22 Cl2 N4 O2



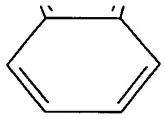
CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



PAGE 2-A

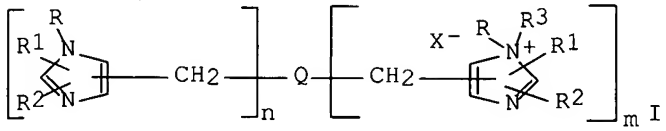


L82 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1981:570978 HCAPLUS Full-text
DN 95:170978
TI Imidazolylmethyl group-containing dyes
IN Patsch, Manfred; Ruske, Manfred
PA BASF A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 34 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3006013	A1	19810820	DE 1980-3006013	19800218
	EP 34725	A2	19810902	EP 1981-100672	19810130
	EP 34725	A3	19820804		
	EP 34725	B1	19840725		
	R: BE, CH, DE, FR, GB, IT				
	US 4451398	A	19840529	US 1981-233479	19810211
	CA 1170254	A1	19840703	CA 1981-370638	19810211
	JP 56129259	A	19811009	JP 1981-20261	19810216
	JP 01048303	B	19891018		
	DK 8100687	A	19810819	DK 1981-687	19810217
	DK 149780	B	19860929		
	DK 149780	C	19870421		

PRAI DE 1980-3006013 A 19800218
DE 1980-3044563 A 19801126

GI



AB Dyes with general structure I are prepared, where R, R1, and R2 = H, alkyl, or alkenyl, R3 = alkyl, X- = anion, Q represents a phthalocyanine, indigoid, Ph-substituted anthraquinone, polycyclic carbonyl, quinacridone, perylenetetracarboxylic diimide, anthrapyrimidine, pyrazoloanthrone, diaminonaphthoquinone, naphthazarin, or naphthalenetetracarboxylic diimide dye residue, m = 0-5, n = 0-5, and $1 \leq (m + n) \leq 5$. I in which $n > 0$ are soluble in water and can be used to dye cellulosic materials, e.g. paper. The dyes are prepared by reaction of QHm+n with imidazoles and paraformaldehydes or with C-(hydroxymethyl)imidazoles in the presence of acid, optionally followed by quaternization.

IC C09B0069-00

CC 40-1 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)
Section cross-reference(s): 43

IT 81-31-2DP, reaction products with 1-methylimidazole and paraformaldehyde 82-20-2DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 128-64-3DP, reaction products with 1-methylimidazole and paraformaldehyde 128-66-5DP, reaction products with 1-methylimidazole and paraformaldehyde 128-70-1DP, reaction products with 1-methylimidazole and paraformaldehyde, di-Me sulfate-quaternized 128-80-3DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 129-09-9DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 132-16-1DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** **147-14-8DP**, imidazolylmethyl derivs. 288-32-4DP, reaction products with copper phthalocyanine and paraformaldehyde 522-75-8DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 616-47-7DP, reaction products with aromatic compds. and paraformaldehyde, di-Me sulfate-quaternized 1072-63-5DP, reaction products with copper phthalocyanine and paraformaldehyde 4118-16-5DP, reaction products with 1-methylimidazole and paraformaldehyde 6505-58-4DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 7098-07-9DP, reaction products with aromatic compds. and paraformaldehyde 13435-22-8DP, reaction products with copper phthalocyanine and paraformaldehyde 14154-42-8DP, reaction products with 1-methylimidazole and paraformaldehyde 36947-68-9DP, reaction products with copper phthalocyanine and paraformaldehyde 52333-12-7DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 79499-09-5DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole** 79554-26-0P 79554-27-1P 79554-28-2P 79554-29-3P 79554-30-6P 79554-51-1P 79554-53-3P 79554-54-4P 79554-58-8P 79554-99-7P 80019-16-5DP, reaction products with **4-(hydroxymethyl)-5-methylimidazole**
RL: MSC (Miscellaneous); PREP (Preparation)

(dyes, manufacture of)

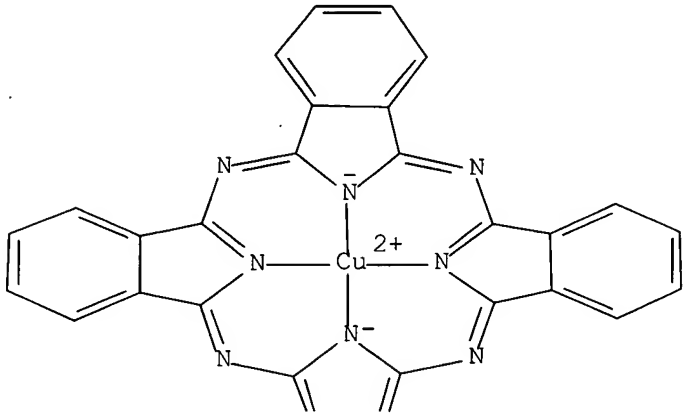
IT **38585-62-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aromatic compds.)

IT **147-14-8DP**, imidazolylmethyl derivs.
RL: MSC (Miscellaneous); PREP (Preparation)
(dyes, manufacture of)

RN 147-14-8 HCAPLUS

CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka
ppa.N32]-, (SP-4-1)- (CA INDEX NAME)

PAGE 1-A



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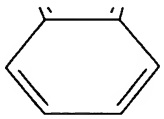
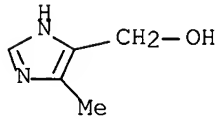


IT **38585-62-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with aromatic compds.)

RN 38585-62-5 HCAPLUS

CN 1H-Imidazole-5-methanol, 4-methyl-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES:   20 NOV 2007  HIGHEST RN 955158-15-3
DICTIONARY FILE UPDATES:  20 NOV 2007  HIGHEST RN 955158-15-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> => d ide can 168

L68  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2007 ACS on STN
RN   271582-84-4  REGISTRY
ED   Entered STN:  20 Jun 2000
CN   Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka
     ppa.N32]-, (SP-4-1)-, mixt. with 9,19-dichloro-5,15-diethyl-5,15-
     dihydrodiindolo[2,3-c:2',3'-n]triphenodioxazine (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Hostafine Blue B 2G, mixt. contg. (9CI)
OTHER NAMES:
CN   CF Blue EX 3357
CN   CF Blue EX 3383
CN   Flexonyl Violet RL-LA
MF   C34 H22 C12 N4 O2 . C32 H16 Cu N8
CI   MXS
SR   CA
LC   STN Files:   CA, CAPLUS

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     CRN  215247-95-3
     CMF  C34 H22 C12 N4 O2
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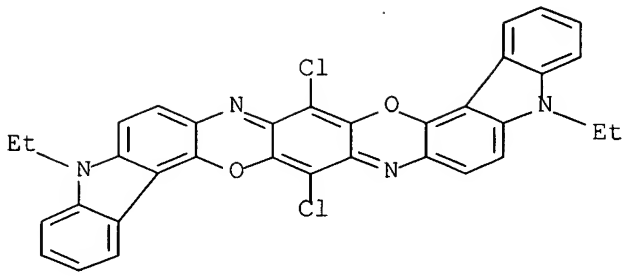
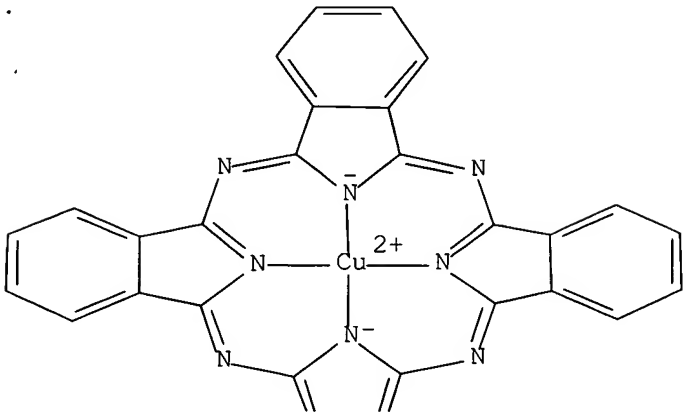


CM 2

CRN 147-14-8
CMF C32 H16 Cu N8
CCI CCS

PAGE 1-A



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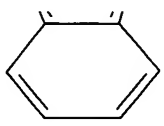

14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:477693

REFERENCE 2: 147:408531

REFERENCE 3: 147:265924

REFERENCE 4: 147:177272

REFERENCE 5: 147:154149

REFERENCE 6: 147:154140

REFERENCE 7: 147:19835

REFERENCE 8: 146:510641

REFERENCE 9: 146:326781

REFERENCE 10: 146:262598

=> d ide can l69

L69 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN **147-14-8** REGISTRY
ED Entered STN: 16 Nov 1984
CN Copper, [29H,31H-phthalocyaninato(2-)-κN29,κN30,κN31,.ka
ppa.N32]-, (SP-4-1)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 29H,31H-Phthalocyanine, copper complex
CN 29H,31H-Phthalocyanine, copper deriv.
OTHER NAMES:
CN (Phthalocyaninato)copper
CN α-Copper phthalocyanine
CN α-Copper phthalocyanine blue
CN α-Phthalocyanine blue
CN β-Copper phthalocyanine blue
CN β-Phthalocyanine blue
CN ε-Copper phthalocyanine
CN 79S26C
CN 79S26C chip
CN Accosperse Cyan Blue GT
CN Acnalin Supra Blue G
CN Acramin Blue F 3G
CN Akrochem 626
CN Aqualine Blue
CN Aquis BW 3571
CN Arlocyanine Blue PS
CN Aztech Chemisperse Cyan 1541
CN B 8M25
CN Bahama Blue BC
CN Bahama Blue BNC
CN Bahama Blue Lake NCNF
CN Bahama Blue WD
CN Bermuda Blue
CN BFD 1121
CN BL 1531
CN Blue 7110V
CN Blue GLA
CN Blue GLSM
CN Blue Microdis
CN Blue phthalocyanaine α-form
CN Blue pigment

CN Blue Toner GTNF
CN BT 4651
CN C.I. 74160
CN **C.I. Pigment Blue 15**
CN **C.I. Pigment Blue 15:1**
CN **C.I. Pigment Blue 15:2**
CN **C.I. Pigment Blue 15:3**
CN **C.I. Pigment Blue 15:4**
CN C.I. Pigment Blue 15:5
CN **C.I. Pigment Blue 15:6**
CN Cab-O-Jet 253
CN Calcotone Blue GP
CN Ceres Blue BHR
CN CFP-FF 775B
CN Chromatex Blue BN
CN Chromofine Blue 4920
CN Chromofine Blue 4920G
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MF C32 H16 Cu N8
CI CCS, COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
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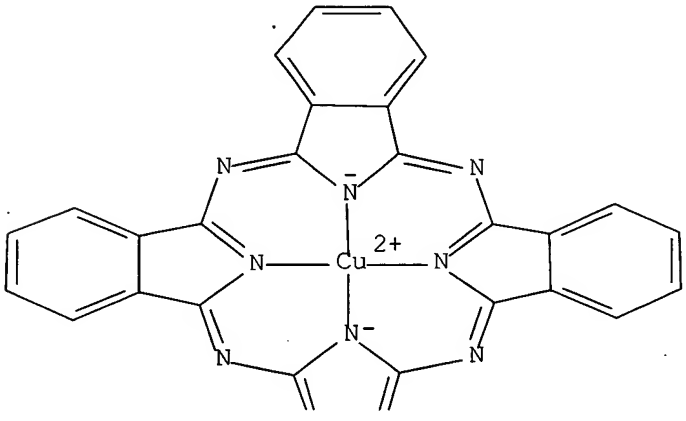
PAGE 1-A



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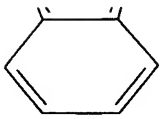

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1233 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
16458 REFERENCES IN FILE CAPLUS (1907 TO DATE)
134 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 147:478113

REFERENCE 2: 147:477779

REFERENCE 3: 147:477661

REFERENCE 4: 147:477649

REFERENCE 5: 147:477613

REFERENCE 6: 147:477503

REFERENCE 7: 147:477155

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REFERENCE 9: 147:477062

REFERENCE 10: 147:475312

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L70 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN **215247-95-3** REGISTRY
ED Entered STN: 08 Dec 1998
CN Diindolo[2,3-c:2',3'-n]triphenodioxazine, 9,19-dichloro-5,15-diethyl-5,15-dihydro- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN C.I. Pigment Violet 23 (8CI)
OTHER NAMES:
CN C.I. 51319
CN Carbazole Dioxazine Violet
CN Carbazole Violet
CN Carbazole Violet 23
CN CFP-FF 802V
CN Chromofine Violet 6510PK
CN Chromofine Violet RE
CN Cosmenyl Violet RL
CN Creanova 877-8895

CN Cromophtal Violet GT
CN Cyanadur Violet
CN Dioxazine purple
CN Dioxazine Violet
CN EB Violet 4B7906
CN EMC Violet RL 10
CN Fastogen Super Violet RN
CN Fastogen Super Violet RN-S
CN Fastogen Super Violet RTS
CN Fastogen Super Violet RVS
CN Fastogen Super Violet RXS
CN Heliofast Red Violet EE
CN Heliofast Violet BN
CN Heliogen Violet
CN Heliogen Violet R Toner
CN Hostaperm Violet BL
CN Hostaperm Violet P-RL
CN Hostaperm Violet RL
CN Hostaperm Violet RL Special
CN Hostaperm Violet RL Special 14-4007
CN Hostaperm Violet RL-NF
CN Hostaperm Violet RL-SP
CN Hostaperm Violet RL-SPL
CN Lake Fast Violet RL
CN Lake Fast Violet RLB
CN Lionogen Violet HR
CN Lionogen Violet R 6100
CN Lionogen Violet R 6200
CN Lionogen Violet RL
CN Lionol Violet HR
CN Monolite Fast Violet R
CN Paliogen Violet 5890
CN Paliogen Violet L 5890
CN Permanent Violet
CN Permanent Violet R
CN Permanent Violet RL
CN Pigment Violet 23
CN PV 23
CN PV Fast Violet BL
CN PV Fast Violet RL-SPE
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AR 6358-30-1
DR 790240-45-8, 12698-54-3, 65381-32-0
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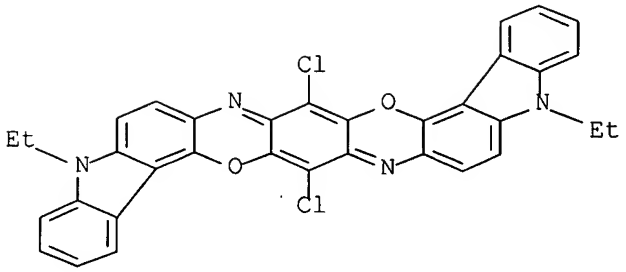
CI COM
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL, USPATOLD



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996 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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REFERENCE 2: 147:477649

REFERENCE 3: 147:459014

REFERENCE 4: 147:458975

REFERENCE 5: 147:450506

REFERENCE 6: 147:450393

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REFERENCE 8: 147:437074

REFERENCE 9: 147:416466

REFERENCE 10: 147:409604

=> d ide can 174 tot

L74 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
RN **38585-62-5** REGISTRY
ED Entered STN: 16 Nov 1984
CN 1H-Imidazole-5-methanol, 4-methyl-, hydrochloride (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Imidazole-4-methanol, 5-methyl-, monohydrochloride (9CI)
OTHER NAMES:
CN 4-(Hydroxymethyl)-5-methylimidazole hydrochloride
CN 4-Methyl-1H-imidazole-5-methanol hydrochloride
CN 4-Methyl-5-imidazolemethanol hydrochloride
CN 5-Methyl-4-imidazolemethanol hydrochloride
DR 121081-11-6, 63779-46-4, 81731-50-2
MF **C5 H8 N2 O . Cl H**
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PS, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
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Other Sources: EINECS**
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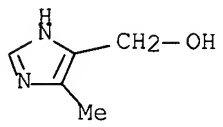
CRN (29636-87-1)



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108 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:78823

REFERENCE 2: 146:421419

REFERENCE 3: 143:287911

REFERENCE 4: 143:8585

REFERENCE 5: 141:17250

REFERENCE 6: 139:180012

REFERENCE 7: 139:142726

REFERENCE 8: 139:73860

REFERENCE 9: 137:247693

REFERENCE 10: 136:340627

L74 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN
RN **29636-87-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN 1H-Imidazole-5-methanol, 4-methyl- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Imidazole-4-methanol, 5-methyl- (9CI)
CN Imidazole-4(or 5)-methanol, 5(or 4)-methyl- (7CI)
CN Imidazole-4-methanol, 5-methyl- (8CI)
OTHER NAMES:
CN 4-(Hydroxymethyl)-5-methylimidazole
CN 4-Methyl-5-(hydroxymethyl)imidazole
CN 4-Methyl-5-imidazolemethanol
CN 5-(Hydroxymethyl)-4-methylimidazole
CN 5-Methyl-1H-imidazole-4-methanol
CN 5-Methyl-4-imidazolemethanol

MF C5 H8 N2 O
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, PS, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
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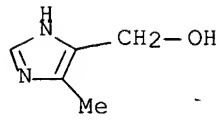

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REFERENCE 2: 147:370595

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REFERENCE 5: 146:229348

REFERENCE 6: 146:27689

REFERENCE 7: 145:301380

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REFERENCE 10: 144:241883

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L2 18 S E3
E WEBER J/AU
L3 1498 S E15-E54
E WEBER JOACHIM/AU
L4 121 S E75,E76
E CLARIANT/CO

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L5        2164 S E99-E216
                E E135+ALL
                E E229+ALL
L6        2172 S E233+RT OR E233-E257/PA,CS OR CLARIANT?/PA,CS
L7           1 S L1 AND L2-L6
                SEL RN

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L8           2 S E258-E259
L9             STR
L10          2 S L9
L11         50 S L9 FUL
                SAV TEMP L11 GREEN591A/A
L12          1 S L8 AND NCNC2/ES
L13          1 S L8 NOT L11,L12
                E "C.I. PIGMENT BLUE"/CN
L14          1 S E271,E273-E276,E278
L15          1 S L13,L14
L16         12 S L11 AND C34H22CL2N4O2
L17          1 S L16 AND CU/ELS
L18          1 S L16 AND 1/NC
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L20         10 S L16 NOT L17,L18,L19

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L24          14 S L21-L23
L25        1001 S L18
L26         462 S (CI OR C I)()PIGMENT VIOLET 23
L27           7 S SUMITONE FAST VIOLET RL 4R
L28         579 S PIGMENT VIOLET 23
L29          16 S HOSTAPERM VIOLET RL NF
L30           7 S HOSTAPERM VIOLET RL SPECIAL
L31           6 S HOSTAPERM VIOLET BL
L32           2 S SUMITOMO FAST VIOLET RL BASE
L33          56 S CARBAZOLE VIOLET
L34           7 S PERMANENT VIOLET RL
L35           2 S HOSTAPERM VIOLET RLNF
L36           7 S FASTOGEN SUPER VIOLET RN
L37           3 S LIONOGEN VIOLET R 6100
L38         136 S DIOXAZINE VIOLET
L39          22 S LIONOGEN VIOLET RL
L40           3 S CFP FF 802V
L41           7 S (CI OR C I)()51319
L42          38 S HOSTAPERM VIOLET RL
L43           1 S UNISPERSE VIOLET B S
L44        1051 S L25-L43
L45       16458 S L15
L46        2590 S (CI OR C I)()PIGMENT BLUE()(15 OR 15 0 OR 15 1 OR 15 2 OR 15
L47       16604 S L45,L46
L48         127 S L12
L49           2 S 4 METHYL(1W)IMIDAZOLE 5 METHANOL
L50          22 S 4 METHYL 5 HYDROXYMETHYL IMIDAZOLE
L51          30 S 4 HYDROXYMETHYL 5 METHYLIMIDAZOLE
L52          18 S 5 HYDROXYMETHYL 4 METHYLIMIDAZOLE
L53         101 S 4 METHYL 5 HYDROXYMETHYLIMIDAZOLE
L54           7 S 4 METHYL 5 IMIDAZOLEMETHANOL
L55         254 S L48-L54
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L57           4 S L24 AND L44
L58           0 S L24 AND L55
L59          14 S L24,L56,L57
L60           2 S L44 AND L55
L61           4 S L47 AND L55
L62          19 S L59-L61
L63           2 S L2-L7 AND L62
L64          17 S L62 NOT L63
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L68           1 S L67 AND L17
L69           1 S L67 AND L15
L70           1 S L67 AND L18
L71           1 S L67 AND L12
L72          76 S L67 AND NCNC2/ES
L73           2 S L72 AND C5H8N2O
L74           2 S L71,L73
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L78           2 S L76 AND L18(L)REACTION PRODUCT
L79           4 S L76 AND L74(L)REACTION PRODUCT
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L81           4 S L77-L80
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